AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application;

--1. (Currently Amended) A network system ~~that~~ having a plurality of network segments, the network system comprising:

~~connects with~~ a plurality of process portions for information processing and that connect the network segments and that can mutually send and receive a message ~~with no specified destination and a message specifying a specific process portion~~ and that can change states to either of first and second states, so as to form a first-state process portion and a second-state process portion, respectively, wherein

~~the network system comprises:~~

a group is made up of the process portions connecting one or more network segments;

only the one process portion in the group is in the first state and the other process portions in the group are in the second state;

[[a]] the first-state process portion ~~that~~ stores [[a]] information of the second-state process ~~portion storing the first-state process portion~~ portions; [[and]]

[[a]] each of the second-state process ~~portion that~~ portions stores ~~only~~ information of the ~~one~~ first-state process portion, wherein

there is only one process portion in the first state[[.]] within a first group and a second group is determined by exchanging messages between the first-state process portion of

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the first group and the first-state process portion of the second group, and

a third group consists of process portions of the first group and process portions of the second group, wherein the process portion determined as the first-state process portion remains in the first state and the process portions not determined are changed into the second state.

--2. (Currently Amended) The network system according to claim 1 wherein:

multiple second-state process portions share information about each other,

one of the multiple second-state process portions in a group copies information about itself to the first-state process portion in the group, and

another of the multiple second-state process portions reads information about that one second-state process portion from the first-state process portion in the group.

--3. (Currently Amended) A network system according to claim 2 wherein:

information describing information for accessing the process portions in the group is copied to the first-state process portion in the group for sharing the information describing information for accessing process portions ·among the other process portions in the group.

--4. (Currently Amended) A network system according to claim 1 further comprising:

means for allowing the process portions to mutually send and receive [[the]] a message with no specified destination and [[the]] a message specifying a specific process portion in a group including the first-state process portion and a second-state process portion storing only the first-state process portion, wherein

the process portions in different groups can send and receive only the message specifying a specific process portion.

--5. (Cancelled)

--6. (Previously Presented) A network system according to claim 1 wherein the process portion comprises error detection means to detect a communication error.

--7. (Previously Presented) A network system according to claim 6 wherein the first-state process portion removes a second-state process portion from storage when the first-state process portion detects a communication error with the second-state process portion.

--8. (Previously Presented) A network system according to claim wherein the second-state process portion changes its state to the first state when the second-state process portion

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detects a communication error with the first-state process portion.

--9. (Previously Presented) A network system according to claim 1 wherein at least one of the process portions has time lapse detection means for detecting an elapsed time.

--10. (Previously Presented) A network system according to claim 9 wherein the first-state process portion removes second-state process portion from a storage when the first-state process portion detects no communication with the second-state process portion for a specified period of time.

--11. (Currently Amended) A network control method for controlling a network system having a plurality of network segments, the method comprising the steps of:

connecting the network segments with a plurality of process portions that can mutually send and receive a message with no specified destination and a message specifying a specific process portion and can change states to either of first and second states, so as to form a first-state process portion and a second-state process portion respectively, the method comprising the steps of:

forming a group of the process portions connecting one or more network segments, wherein only one process portion in the group is in the first state and the other process portions in the group are in the second state;

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~~controlling a first-state process portion to store a~~ storing information of the second-state process ~~portion storing~~ portions in the first-state process portion,

~~causing a second-state process portion to store only~~ storing information of the one first-state process portion~~, so that~~ in each of the second-state portions, wherein

~~the network contains~~ there is only one first-state process portion[[.]] in a first group and a second group as determined by exchanging messages between the first-state process portion of the first group and the first-state process portion of the second group; and

forming a third group consisting of process portions of the first group and process portions of the second group, wherein the process portion determined as only the one first-state process portion remains in the first state and the process portions not determined are changed into the second state.

--12. (Currently Amended) The network control method according to claim 11 wherein:

multiple second-state process portions share information about each other, ~~information about~~ one of the multiple second-state process portions ~~is copied~~ in a group copies information about itself to the first-state process portion, and

another of the multiple second-state process portions in a group reads information about the one second-state process

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portion from the first-state process portion <u>in a group</u>.

--13. (Currently Amended) The network control method according to claim 12 wherein:

the plurality of process portions share information describing information for accessing the plurality of process portions <u>in a group</u> by copying that information to the first-state process portion <u>in a group</u>.

--14. (Currently Amended) The network control method according to claim 11 further comprising:

mutually sending and receiving [[the]] <u>a</u> message with no specified destination and [[the]] <u>a</u> message specifying a specific process portion within a group consisting of the first-state process portion and a second-state process portion ~~storing only the first-state process portion,~~ and

sending and receiving only the message specifying a specific process portion between process portions in different groups.

--15. (Cancelled) The network control method according to claim 14 further comprising:

exchanging messages between the first-state process portion in one group and a first-state process portion in another group to determine only one first-state process common between the both groups.

--16. (Previously Presented) The network control method according to claim 11 wherein:

a first-state process portion removes a second-state process portion from storage when the first-state process portion detects a communication error with the second-state process portion.

--17. (Previously Presented) The network control method according to claim 11 wherein:

a second-state process portion changes its state to the first state when the second-state process portion detects a communication error with the first-state process portion.

--18. (Previously Presented) The network control method according to claim 11 wherein:

the first-state process portion removes a second-state process portion from storage when the first-state process portion detects no communication with the second-state process portion for a specified period of time.

--19. (Previously Presented) A signal sender/receiver comprising:

message generation means to generate a message specifying a specific destination and a message with no specified destination;

message analysis means to receive a transmitted message and analyze its contents;

state control means to change the signal sender/receiver to a, first or second state depending on whether another networked apparatus is available and is in the first or second state; and

storage means to store information about the signal sender/receiver and other apparatuses of the network,

wherein the signal sender/receiver changes to the second state and stores only the other first-state apparatus storing information about the signal sender/receiver when the other first-state apparatus is connected to the network,

and wherein the signal sender/receiver stores information about another second-state apparatus when the second-state apparatus is connected to the network.

--20. (Previously Presented) The signal sender/receiver according to claim 19 wherein:

the signal sender/receiver copies information about itself to the only other first-state apparatus storing information about the signal sender/receiver and reads information about another second-state apparatus stored in the other first-state apparatus when the other first-state apparatus is connected to the network.

--21. (Previously Presented) The signal sender/receiver according to claim 20 wherein:

the signal sender/receiver copies information describing information for accessing other networked apparatuses to the

other first-state apparatus and reads the information describing information accessing stored in the first-state apparatus as required.

--22. (Previously Presented) The signal sender/receiver according to claim 21 wherein:

the signal sender/receiver can mutually send or receive the message specifying a specific destination and the message with no specified destination when the signal sender/receiver is connected within a group of the first-state apparatus and a second-state apparatus storing only the first-state apparatus or can send or receive only the message with a specified specific destination from an apparatus in a different group.

--23. (Previously Presented) The signal sender/receiver according to claim 22 wherein:

the signal sender/receiver, when in the first state, exchanges messages with a first-state apparatus in another group to determine the only first-state apparatus common between the both groups.

--24. (Previously Presented) The signal sender/receiver according to claim 22 wherein:

the signal sender/receiver, when in the second state, transfers a message from a first-state apparatus in another group to the first-state apparatus in a group to which the signal sender/receiver belongs.

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--25. (Previously Presented) The signal sender/receiver according to claim 19 wherein

the signal sender/receiver further comprises error detection means for detecting communication errors.

--26. (Previously Presented) The signal sender/receiver according to claim 25 wherein:

the signal sender/receiver, when in the first state, detects a communication error with a second-state apparatus ~~to~~ remove the signal sender/receiver removes the second-state apparatus from storage.

--27. (Previously Presented) The signal sender/receiver according to claim 25 wherein:

the signal sender/receiver, when in the second state, detects a communication error with a first-state apparatus to change itself to the first state.

--28. (Previously Presented) The signal sender/receiver according to claim 19 wherein:

the signal sender/receiver includes time lapse detection means for detecting an elapsed time.

--29. (Previously Presented) The signal sender/receiver according to claim 19 wherein:

when the signal sender/receiver, in the first state,

detects no communication with a second-state apparatus for a specified period of time the signal sender/receiver removes the second-state apparatus from storage.